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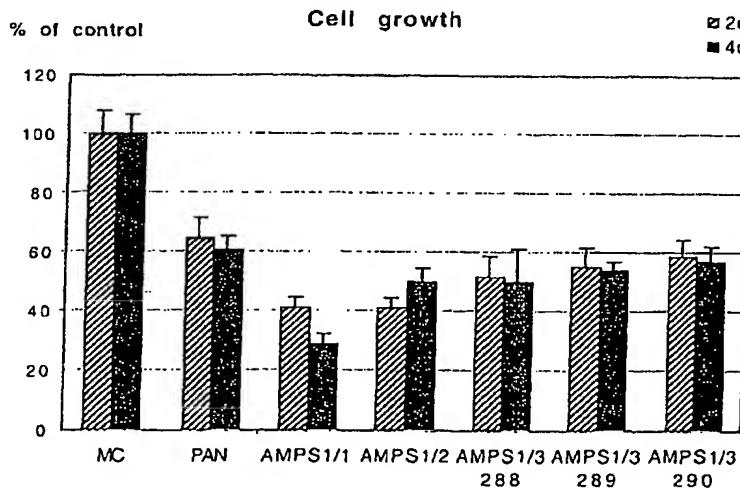
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(54) Title: POLYMERIC COMPOSITION, MATERIAL PRODUCED THEREOF AND THEIR APPLICATIONS



(57) Abstract: The invention relates to a novel polymer composition comprising at least one copolymer constituted of acrylic (AC) monomer units and of at least one water-soluble comonomer unit, which is preferably 2-acrylamido-2-methyl-propane sulfonic acid (AMPS). The composition is used to produce materials, such as membranes, film or surface coatings, that are suitable as highly tissue compatible supports for epithelial cells, such as hepatocytes. The materials are suitable to be used in a bioartificial liver, where they work as separating membrane and carrier for adhesion-dependent tissue cells. As an example it is described how selectively permeable membranes are formed by a phase inversion process from these acrylic copolymers with varying content of 2-acrylamido-2-methyl-propane sulfonic acid (AMPS) and how they interact with liver cells to construct a biohybrid organ for liver replacement.

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